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**FOR IMMEDIATE RELEASE**

**Microbicide Trials Network researchers bring current and emerging issues  
in HIV prevention to the forefront at IAS 2015**

**VANCOUVER, July 21, 2015** – Researchers from the National Institutes of Health-funded [Microbicide Trials Network](#) (MTN) presented on a range of HIV prevention topics at the 8th biennial International AIDS Society (IAS) Conference on HIV Pathogenesis, Treatment and Prevention (IAS 2015) in Vancouver July 19-22.

Oral and poster presentations included new findings from the [VOICE D](#) behavioral sub-study of [VOICE](#), a major HIV prevention trial involving more than 5,000 women in Africa, providing additional insight into the reasons that adherence to product use was so low; baseline data describing participants in the first Phase II trial of a rectal microbicide ([MTN-017](#)) and results of a novel study that have implications for understanding whether a single dose of a product to the vagina or rectum feasibly could protect against HIV acquired through both vaginal and anal sex.

In addition, interactive satellite sessions organized by the MTN explored two critically important issues: determining next steps in the development and evaluation of rectal microbicides and addressing the need for inclusion of adolescents in biomedical prevention trials.

Following are some of the presentations involving MTN-affiliated researchers at IAS 2015:

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*Oral and Poster Presentations*

**Women tell the truth about the reasons they lied in VOICE**

Women who participated in the VOICE study seemed to understand the importance of product use and honest reporting but also acknowledged and provided explanations for widespread lying during the trial, reports Elizabeth T. Montgomery, Ph.D., a behavioral scientist from Women's Global Health Imperative, RTI International, in San Francisco, and an investigator involved in an ancillary study of VOICE called VOICE D.

VOICE D was designed to understand the VOICE study's disparate results, including why most of the study's 5,029 participants had not used their products nor were willing to admit this. Indeed, although behavioral measures, including what women themselves reported to study staff, indicated that 90 percent of the participants followed the daily regimens, tests of stored blood samples at the trial's end found less than 30 percent used their product regularly (either tenofovir tablets, Truvada® tablets or tenofovir vaginal gel). In VOICE D, researchers examined participants' perceptions of honesty and dishonesty gleaned from in-depth interviews and/or focus group discussions with 171 former VOICE participants from Uganda, South Africa and Zimbabwe, most of whom took part after VOICE results were known and had agreed to receive blood test results indicating their actual patterns of product use during VOICE.

Women said they valued their participation in VOICE. They also suggested real-time monitoring would have improved adherence and honest reporting. Women didn't admit to not using their products largely because they feared being reprimanded by study staff, "talked about," or "expelled" from the study altogether. Said one woman: "Instead of giving us pills to drink only for us to lie about having drunk them, I think it would be better for you to get us tested on each and every visit...I think that is what can be done to prevent lying."

*African women's perceptions of honesty and dishonesty about product use in the context of HIV prevention research during the VOICE (MTN-003) trial (TUPEC527)*

## **What HIV prevention method would women prefer? Former VOICE study participants opt for long-acting approaches**

When it comes to understanding women's preferences for different HIV prevention products who better to ask than women who took part in VOICE, a trial in which the majority of participants did not use the products assigned to them? VOICE found none of the three products tested – tenofovir gel, oral tenofovir and oral Truvada® – were effective among the 5,029 women in the study, most likely because women hadn't used them daily as recommended. Several other studies, however, have shown antiretroviral (ARV)-based prevention methods are highly effective when used consistently.

Questions about product preferences were asked during in-depth interviews with 68 former VOICE participants from Uganda, South Africa and Zimbabwe who had been invited to take part in an ancillary study called VOICE D that sought to better understand product use and nonuse in VOICE. Women were shown photographs of and told about eight different HIV prevention products and asked to select the ones they would be interested in using and why.

Reasons for choosing one product over another differed, and while there was interest in having a variety of HIV prevention products and delivery methods, the majority (55 percent) said they would prefer to use long-acting methods (injectables, implants or vaginal rings). On-demand approaches – a fast-acting vaginal film and a vaginal suppository – which would be used just prior to sex were favored by 19 percent, while the daily oral tablet and vaginal gel tested in VOICE were preferred by 15 percent and 11 percent, respectively. Barrier methods were discussed but not included in the analysis. Research on different product delivery methods is essential, but understanding the types of products different high-risk populations are most interested in using should be considered, says Ellen Luecke, M.P.H., from Women's Global Health Imperative, RTI International, in San Francisco, who presented the results. Products that suit women's lifestyles and needs are more likely to be used, she added.

*HIV pre-exposure prophylaxis (PrEP) product preference among women in the VOICE D (MTN-003D) study (TUPEC505)*

## **Researchers Describe Participants in the First Phase II Study of a Rectal Microbicide Results of multinational study expected early 2016**

As the first expanded safety and acceptability study of a rectal microbicide ends and results are being analyzed, researchers provide insights into study participants. The study, MTN-017, was designed to evaluate the safety and acceptability of a rectally administered reduced glycerin formulation of tenofovir gel, as well as oral Truvada®, among HIV uninfected men who have sex with men and transgender women. MTN-017 was an open-label trial with all participants randomized to each of three study regimens (reduced glycerin tenofovir gel used both daily and before and after sex; and Truvada tablets taken daily) for eight weeks.

Between September 2013 and November 2014, 349 potential participants were screened at eight clinical research sites located in Peru, South Africa, Thailand and the United States. The study enrolled 195 participants with an average age of 31 years, 80 percent of whom were college educated. Twenty-three participants (12 percent) identified as transgender women, most of whom were Thai.

According to Ross Cranston, M.D., protocol chair of the study and an associate professor at the University of Pittsburgh School of Medicine, most participants considered themselves at some risk for HIV infection (67 percent). In addition, nearly half (49 percent) reported engaging in condomless receptive anal intercourse in the previous eight weeks prior to enrollment. When asked whether they would consider using a rectal gel if it was found effective against HIV and available, 97 percent of participants indicated they would use it before or after anal sex, with 93 percent indicating their willingness to use it on a daily basis. Ninety-four percent of the study participants also indicated they would consider taking oral Truvada.

Final results of MTN-017 are expected in early 2016 and will provide information on safety, drug distribution and adherence to study products, as well as further information on their acceptability.

*Baseline characteristics of a rectal phase 2 extended safety and acceptability microbicide study of tenofovir reduced-glycerin 1% gel: MTN-017 (TULBPE22)*

## Safety and drug absorption study suggests potential of tenofovir gel for both anal and vaginal sex

In a small but important step toward the development of a product that could offer HIV protection during both anal and vaginal sex, researchers report that when tenofovir gel is applied into the vagina, a low amount of active drug is distributed to the rectum and, similarly, when the gel is applied into the rectum, a low amount of active drug is distributed to the vagina. The study, MTN-014, examined safety and drug absorption patterns in both rectal and vaginal tissue when a reduced glycerin formulation of tenofovir gel was applied rectally and vaginally in 14 HIV-uninfected women. In previous studies, the reduced glycerin formulation of tenofovir gel was found to be better tolerated than the original formulation when used rectally but prior to MTN-014, its safety had not been tested with vaginal use.

Because women engage in both anal and vaginal sex, study researchers wanted to know whether a reduced glycerin microbicide gel would be distributed between the vagina and the rectum, and if so by how much. To answer these questions, participants in the Phase I study were randomly assigned into two groups: one group received a daily vaginal application of the gel for two weeks, followed by a daily rectal application of the gel for two weeks, with a six-week break between regimens. A second group received a daily rectal application of the gel for two weeks, followed by a daily vaginal application of the gel for two weeks, again with a six-week break between regimens. With each regimen, researchers took tissue samples from the rectum and vagina after two weeks and compared the amount of drug in each. Daily gel doses were given in the clinic.

The study, conducted at the Bronx Prevention Center in New York and led by Gonasagrie Nair, M.B.Ch.B. of the Centre for the AIDS Programme Research in South Africa (CAPRISA) in Durban, and Jessica Justman, M.D., of ICAP at Columbia University, found low tissue concentrations in the opposite compartments after two weeks of use and the reduced glycerin gel generally safe in both the rectum and vagina. “The question is whether these low cross-compartment levels would be high enough to provide protection from HIV,” said Dr. Justman, who presented the results. “Further research is warranted to determine if reduced glycerin tenofovir gel used in the vagina has the potential to protect tissue susceptible to HIV through anal sex, and vice versa,” she added.

*Pharmacokinetics and pharmacodynamics of tenofovir reduced-glycerin 1% gel in the rectal and vaginal compartments in women: a cross-compartmental study with directly observed dosing (TUAC0206LB)*

### Satellite Sessions

#### Creating Rectal Microbicides People Desire: How do we get there?

With follow-up of participants now complete in MTN-017, the first-ever Phase II safety and acceptability study of a rectal microbicide for HIV prevention, many questions remain about future directions for the rectal microbicide research agenda. Though the need for such a product is great given the high rates of HIV from condomless anal sex in men who have sex with men and transgender women around the world, key issues about what kind of a product would be most desirable to use need to be considered before developing and launching an effectiveness study. Indeed, the opportunities and challenges posed by conducting a Phase III rectal microbicide trial are multifaceted. This session will include a panel of scientists, advocates and research participants who will share the latest information on rectal microbicide science, and discuss next steps in the development of rectal microbicides to prevent new HIV infections associated with anal sex. Among the questions to be addressed: Can we develop a product that people will want to use? Should we move forward with a tenofovir-based product? How should we design a follow-up rectal microbicide study?

[Creating Rectal Microbicides People Desire: How do we get there?](#) (IAS Non-Commercial Satellite - SUSA05)

Presented by MTN, AVAC: Global Advocacy for HIV Prevention, and International Rectal Microbicide Advocates (IRMA)

#### Minor Issues, Major Consequences: Ensuring Adolescents’ Access to Proven Prevention Methods

Biomedical prevention approaches found to be safe and effective in adults cannot be approved for use in adolescents without studies specifically in this age group. Despite adolescents being among the most vulnerable populations at risk of HIV, protections afforded to them as minors can bar entry into clinical trials and may deny this and future generations the kind of protection they need most – protection against HIV.

If the dapivirine ring is found safe and effective in ASPIRE and The Ring Study and subsequently approved, it would be a triumph for women. Yet, women under 18, who are among those at highest risk, could be left out, absent safety data in adolescents. Meanwhile, a US study is struggling to enroll girls, who must admit they've had sex: Parental permission is also needed. In Africa, complex, even conflicting, laws and regulations could stymie a potential bridging study. Indeed, in many countries the very laws meant to protect minors negate their rights to confidentiality, and having to disclose sexual activity and HIV status, may engender social harms. Hence, a US PrEP licensure trial in 15-17 year-old MSM is taking place only in states with laws interpreted to allow self-consent. Teens deserve to be protected in and served by clinical research, to ensure their access to proven HIV prevention methods.

[Minor Issues, Major Consequences: Ensuring Adolescents' Access to Proven Prevention Methods](#) (IAS Non-Commercial Satellite -MOSA07); Presented by MTN, Adolescent Trials Network for HIV/AIDS Interventions (ATN), International Partnership for Microbicides (IPM), and AVAC: Global Advocacy for HIV Prevention

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### **About the Microbicide Trials Network**

*The Microbicide Trials Network (MTN) is an HIV/AIDS clinical trials network established in 2006 by the National Institute of Allergy and Infectious Diseases with co-funding from the Eunice Kennedy Shriver National Institute of Child Health and Human Development and the National Institute of Mental Health, all components of the National Institutes of Health. Based at Magee-Womens Research Institute and the University of Pittsburgh, the MTN brings together international investigators and community and industry partners whose work is focused on the development and rigorous evaluation of promising microbicides – products applied inside the vagina or rectum that are intended to prevent the sexual transmission of HIV – from the earliest phases of clinical study to large-scale trials that support potential licensure of these products for widespread use. More information about the MTN is available at <http://www.mtnstopshiv.org>.*

### **About VOICE and VOICE D Sub-study**

*VOICE – Vaginal and Oral Interventions to Control the Epidemic – looked to determine whether daily use of an ARV tablet (tenofovir or Truvada) or daily use of vaginal gel containing tenofovir was safe and effective in preventing HIV in women. It was conducted between September 2009 and August 2012 and enrolled 5,029 women from 15 clinical research sites in Uganda, South Africa and Zimbabwe. No safety concerns were identified, though no product was effective. Although adherence to product use was calculated to be about 90 percent based on what the participants themselves had reported to trial staff and on monthly counts of unused gel applicators and leftover pills, tests of stored blood samples indicate that most participants did not use their assigned products daily as recommended. Young, single women were the least likely to use the products and also the most likely to acquire HIV. Primary results were reported in in the 5 February 2015 issue of the New England Journal of Medicine. More information can be found at <http://www.mtnstopshiv.org/news/studies/mtn003>*

*VOICE D was one of two social and behavioral research sub-studies of VOICE aiming to understand the reasons women enrolled and stayed in the study and most did not adhere to product use. VOICE D was conducted after VOICE; stage 2 of VOICE D was implemented in response to VOICE results and involved 127 former participants who took part in in-depth interviews and/or focus group discussions after learning the results of blood tests indicating their actual patterns of product use during the trial, to elicit candid discussion about the challenges women experienced in using the products. The most common themes that emerged were fears about the products and their side effects, which were primarily fueled by other participants, relatives and community members' negative attitudes about the products.*

### **About MTN-017**

*The first Phase II trial of a rectal microbicide, MTN-017 was designed to evaluate the rectal safety, drug absorption and acceptability of a reduced glycerin formulation of tenofovir gel, as well as oral Truvada, among men who have sex with men and transgender women. The study has completed enrollment of 195 men who have sex with men (MSM) and transgender women at trial sites in Peru, South Africa, Thailand and the United States, including Puerto Rico. Results of MTN-017, expected in early 2016, will aid in decision making about whether researchers will conduct a larger follow-up trial of reduced glycerin tenofovir gel as a rectal microbicide.*